

**THE 21st TAIWAN-JAPAN-KOREA SYMPOSIUM ON  
STRONGLY CORRELATED ELECTRON SYSTEMS (TJK21)**

**6 April 2023 (Thursday)**

***Session I***

08:20		Registration
08:45		Opening Remarks
		<i>Session Chair: Di-Jing Huang</i>
09:00	Keynote Speech	<b>ARPES to RIXS Studies of High-Temperature Superconductors</b> <i>Atsushi Fujimori, University of Tokyo, Japan</i>
09:40	A1	<b>Anomalous ordered magnetic moments in Co<sup>2+</sup> and V<sup>3+</sup> magnetic systems</b> <i>Jae-hoon Park, POSTECH, Korea</i>
10:10	A2	<b>Quantum fluctuations of charge order induce phonon softening in La<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub></b> <i>Hsiao-Yu Huang, NSRRC, Taiwan</i>
10:25		Coffee break

***Session II***

		<i>Session Chair: Ying-Hao Chu</i>
10:40	A3	<b>Antiferromagnetic domain imaging via linear magnetoelectric effect</b> <i>Tsuyoshi Kimura, University of Tokyo, Japan</i>
11:10	A4	<b>Strongly correlative ionic transport triggered by oxygen-vacancy ordering transition in a doped multiferroic</b> <i>Chan-Ho Yang, KAIST, Korea</i>
11:40	A5	<b>Twisted complex oxide lateral homostructures</b> <i>Jan-Chi Yang, National Cheng Kung Univ., Taiwan</i>
12:10		Poster flash session <span style="float: right;"><i>Session Chair: Cheng-Maw Cheng</i></span>
12:40		Group Photo/Lunch/ Poster session (start at 13:20)

**6 April 2023 (Thursday)**

***Session III***

		<i>Session Chair: Way-Faung Pong</i>
14:20	B1	<b>Quantum anomalous Hall effect in 2D magnetic materials</b> <i>Jaejun Yu, Seoul National University, Korea</i>
14:50	B2	<b>Enhancement of electronic nematic susceptibility near the first superconducting dome in the kagome superconductor <math>\text{Cs}(\text{V}_{1-x}\text{Ti}_x)_3\text{Sb}_5</math></b> <i>Kee Hoon Kim, Seoul National University, Korea</i>
15:20	B3	<b>Quantum critical 2D Bose gas formation in the honeycomb antiferromagnet <math>\text{YbCl}_3</math></b> <i>Yosuke Matsumoto, Max Planck Institut, Germany</i>
15:50	B4	<b>Observation of the charge density wave gap in CuTe with ARPES</b> <i>Ping-Hui Lin, NSRRC, Taiwan</i>
16:05		<b>Coffee break</b>
		<i>Session Chair: Chao-Hung Du</i>
16:20	B5	<b>Metal-insulator transition and negative magnetoresistance in <math>\text{Ba}_{3-x}\text{Eu}_x\text{Nb}_5\text{O}_{15}</math></b> <i>Takuro Katsufuji, Waseda University, Japan</i>
16:50	B6	<b>Superconductivity in Ternary Telluride <math>\text{Sc}_6\text{MTe}_2</math> with 3d, 4d, and 5d Transition Metals</b> <i>Yoshihiko Okamoto, University of Tokyo, Japan</i>
17:20	B7	<b>The Dynamical Charge Response of Plasmons to the Charge-Density-Wave Order in CuTe</b> <i>Ming-Wen Chu, National Taiwan University, Taiwan</i>
17:50	B8	<b>Dirac nodal line in hourglass semimetal <math>\text{Nb}_3\text{SiTe}</math></b> <i>Ro-Ya Liu, NSRRC, Taiwan</i>
18:20		Departure for banquet

## 7 April 2023 (Friday)

### Session IV

		<i>Session Chair: Atsushi Fujimori</i>
08:30	C1	<b>Ab initio studies of cuprate superconductors and analyses on the electron fractionalization</b> <i>Masatoshi Imada, Waseda Univ./Toyota Phys. Chem. Res. Inst. /Sophia Univ., Japan</i>
09:00	C2	<b>New twists in strongly correlated electronic systems: from Kondo screening to unconventional superconductivity</b> <i>Chung-Yu Mou, National Tsing Hua University, Taiwan</i>
09:30	C3	<b>Revealing the mystery of strange metal states in correlated electron systems</b> <i>Chung-Hou Chung, National Yang Ming Chiao Tung University, Taiwan</i>
10:00	C4	<b>Unconventional exciton evolution from the pseudogap to superconducting phases in cuprates</b> <i>Amol Singh, NSRRC, Taiwan</i>
10:15		Coffee break

### Session V

		<i>Session Chair: Jaejun Yu</i>
10:30	C5	<b>My story of van der Waals magnets and Prof. Shin</b> <i>Je-Geun Park, Seoul National University, Korea</i>
11:00	C6	<b>Atomically Resolved Electronic Structure of Copper-Oxide Chains and Planes on Incommensurate Charge Order in <math>\text{YBa}_2\text{Cu}_3\text{O}_{6+x}</math></b> <i>Ya-Ping Chiu National Taiwan Univ., Taiwan</i>
11:30	C7	<b>First-principles studies of delicate octahedra tilting in cuprates</b> <i>Chi-Cheng Lee, Tamkang Univ., Taiwan</i>
12:00	C8	<b>Solving high-temperature superconductivity with quantum computers</b> <i>Kwon Park, KIAS, Korea</i>
12:30		Closing Remarks <i>Session Chair: Di-Jing Huang</i>
12:50		Lunch & Academic Visit for future cooperation

### Organizers

National Synchrotron Radiation Research Center (NSRRC), Taiwan

Center for Nanotechnology, Materials Science and Microsystems, National Tsing Hua University (NTHU), Taiwan

MICAtronics, National Tsing Hua University (NTHU), Taiwan